

AMENDMENTS

IN THE CLAIMS:

Please cancel Claims 28-35 without prejudice.

1. (Original) A transmission apparatus in a CDMA (Code Division Multiple Access) mobile communication system, wherein transmission frames each have a plurality of time slots, and each of the time slots includes two data parts having the same length, a midamble intervening between the data parts, and a guard period for dividing the consecutive time slots, the transmission apparatus modulating the frames into a radio signal with a modulation signal and transmitting the modulated radio signal using a plurality of antennas, the transmission apparatus comprising:

a power amplifier for amplifying the radio signal;

a controller for generating a switching control signal in a guard period of time slots of a frame associated with the radio signal amplified by the power amplifier; and

a switch for switching the amplified radio signal from the power amplifier between a first and a second antenna in response to the switching control signal.

2. (Original) The transmission apparatus as claimed in claim 1, wherein the controller generates the switching control signal in a guard period of the last time slot among the time slots of the frame associated with the radio signal amplified by the power amplifier.

3. (Original) The transmission apparatus as claimed in claim 2, wherein the guard period has a length of 96 chips.

4. (Original) The transmission apparatus as claimed in claim 2, wherein the controller disables the power amplifier at a start point of the guard period and then

outputs the switching control signal when an output level of the power amplifier is lowered to a predetermined level.

5. (Original) A transmission method in a CDMA (Code Division Multiple Access) mobile communication system, wherein transmission frames each have a plurality of time slots, and each of the time slots includes two data parts having the same length, a midamble intervening between the data parts, and a guard period for dividing the consecutive time slots, the transmission method modulating the frames into a radio signal with a modulation signal and transmitting the modulated radio signal using a plurality of antennas, the transmission method comprising the steps of:

amplifying the radio signal;
generating a switching control signal in a guard period of time slots of a frame associated with the amplified radio signal; and
switching the amplified radio signal between a first and a second antenna in response to the switching control signal.

6. (Original) The transmission method as claimed in claim 5, wherein the switching control signal is generated in a guard period of the last time slot among the time slots of the frame associated with the amplified radio signal.

7. (Original) The transmission method as claimed in claim 6, wherein the guard period has a length of 96 chips.

8. (Original) A transmission apparatus in a CDMA (Code Division Multiple Access) mobile communication system, wherein transmission frames each have two sub-frames, and each of the sub-frames has (i) a plurality of time slots each including two data parts having the same length, a midamble intervening between the data parts, and a first guard period for dividing the consecutive time slots, (ii) a downlink pilot time slot, (iii) a

second guard period and (iv) an uplink pilot time slot, intervening between a first time slot and a second time slot among the time slots, the transmission apparatus modulating the sub-frames into a radio signal with a modulation signal and transmitting the modulated radio signal using a plurality of antennas, the transmission apparatus comprising:

- a power amplifier for amplifying the radio signal;
- a controller for generating a switching control signal in a non-transmission period of a sub-frame associated with the radio signal amplified by the power amplifier; and
- a switch for switching the amplified radio signal from the power amplifier between a first and a second antenna in response to the switching control signal.

9. (Original) The transmission apparatus as claimed in claim 8, wherein the non-transmission period is a first guard period of time slots of the sub-frame associated with the amplified radio signal.

10. (Original) The transmission apparatus as claimed in claim 9, wherein the switching control signal is generated in a first guard period of the last time slot among time slots of the sub-frame associated with the amplified radio signal.

11. (Original) The transmission apparatus as claimed in claim 10, wherein the first guard period has a length of 96 chips.

12. (Original) The transmission apparatus as claimed in claim 8, wherein the non-transmission period is a downlink non-transmission period of the sub-frame.

13. (Original) The transmission apparatus as claimed in claim 12, wherein the downlink non-transmission period includes the second guard period, the uplink pilot time slot and the second time slot.

14. (Original) The transmission apparatus as claimed in claim 13, wherein the downlink non-transmission period is 875 μ sec.

15. (Original) The transmission apparatus as claimed in claim 8, wherein the non-transmission period is an uplink non-transmission period of the sub-frame.

16. (Original) The transmission apparatus as claimed in claim 15, wherein the uplink non-transmission period includes the first time slot, the downlink pilot time slot and the second guard period.

17. (Original) The transmission apparatus as claimed in claim 16, wherein the uplink non-transmission period is 825 μ sec.

18. (Original) A transmission method in a CDMA (Code Division Multiple Access) mobile communication system, wherein transmission frames each have two sub-frames, and each of the sub-frames has (i) a plurality of time slots each including two data parts having the same length, a midamble intervening between the data parts, and a first guard period for dividing the consecutive time slots, (ii) a downlink pilot time slot, (iii) a second guard period and (iv) an uplink pilot time slot, intervening between a first time slot and a second time slot among the time slots, the transmission method modulating the sub-frames into a radio signal with a modulation signal and transmitting the modulated radio signal using a plurality of antennas, the transmission method comprising the steps of:

amplifying the radio signal;
generating a switching control signal in a non-transmission period of a sub-frame associated with the amplified radio signal; and

switching the amplified radio signal between a first and a second antenna in response to the switching control signal.

19. (Original) The transmission method as claimed in claim 18, wherein the non-transmission period is a first guard period of time slots of the sub-frame associated with the amplified radio signal.

20. (Original) The transmission method as claimed in claim 19, wherein the switching control signal is generated in a first guard period of the last time slot among time slots of the sub-frame associated with the amplified radio signal.

21. (Original) The transmission method as claimed in claim 20, wherein the first guard period has a length of 16 chips.

22. (Original) The transmission method as claimed in claim 18, wherein the non-transmission period is a downlink non-transmission period of the sub-frame.

23. (Original) The transmission method as claimed in claim 22, wherein the downlink non-transmission period includes the second guard period, the uplink pilot time slot and the second time slot.

24. (Original) The transmission method as claimed in claim 23, wherein the downlink non-transmission period is 875 μ sec.

25. (Original) The transmission method as claimed in claim 18, wherein the non-transmission period is an uplink non-transmission period of the sub-frame.

26. (Original) The transmission method as claimed in claim 25, wherein the uplink non-transmission period includes the first time slot, the downlink pilot time slot and the second guard period.

27. (Original) The transmission method as claimed in claim 26, wherein the uplink non-transmission period is 825 μ sec.

Claims 28-35 (Cancelled).